Coping Under Pressure: Cognitive Strategies for Maintaining Confidence Among Soccer Referees

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Referees are routinely subjected to a wide range of potential physical and psychological stressors, yet little is known about the extent to which these are perceived as aversive or the mechanisms which motivate officials to maintain their activities. The purpose of this study was to give experienced soccer referees the opportunity to offer explanations for and responses to criticism and abuse. A 4-page postal questionnaire was completed by 42 referees. Results indicated that an average of over 16 hours per week was spent on refereeing duties, and 71% of the respondents felt physically drained after matches. However, 100% asserted that the time and energy they put into refereeing was worthwhile. A number of strategies to cope with negative evaluations were noted. The referees expect to be the object of censure by players, coaches and spectators, but use external attributions such as people's bias and lack of knowledge to explain dissent. While admitting to making errors, they perceive their misjudments as representing opportunities to improve. Although respecting other referees and making use of support systems, they believe that their skills are superior to those of fellow officials. They also identify their devotion to soccer, rather than the desire for power and prestige, as the main reason for their involvement. The findings portray soccer officials as confident and resilient individuals who admit to occasional errors but interpret these as positive opportunities for self-improvement. A range of coping mechanisms serve to enhance self-esteem and help referees resolve the mismatch between their perceived competence and the criticism received from others.

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Soccer (association football) officials are routinely subjected to a wide range of potential stressors. Analyses of English (Catterall, Reilly, Atkinson, & Goldwells, 1993), Danish (Krustrup & Bangsbo, 2001) and Japanese (Asami, Togari, & Ohashi, 1988) referees reveal a considerable physical toll, with about 10 km distance covered in a typical match. Of this distance, it is estimated that 47% is spent jogging, 23% walking, 12% sprinting, and 18% reverse running, with an average heart rate of 165 beats per minute recorded.

In addition, referees experience immediate, unrestrained negative feedback throughout and after a match. As England Premiership referee David Elleray stated, "Almost every time you blow the whistle, you upset half the players and at least half the crowd" (Learning English, 2006).

Soccer referees identify spectators, players, coaches, trainers and other personnel as sources of aggression (Folkesson, Nyberg, Archer, & Norlander, 2002). At the extreme, referees and their assistants have been pushed, punched, kicked, and even shot to death by players, managers, coaches and fans. In April, 2002, two referees were attacked by players in separate incidents in Africa when a teammate had been sent off and when a goal had been disallowed. Referees and their regulating bodies are well aware of these sources of threat, and some attempts have been made to provide psychological training to help them cope (Mahoney, 2003).

In addition, match-specific demands are extreme. The referee must have a thorough knowledge of the current laws of soccer and implement them while keeping constant vigilance over complex activities and interactions. Considerable amounts of time must also be spent on pre-match preparation, travel, and post-match reports.

A few studies have examined referee responses to stress in basketball (Kaissidis-Rodafinos & Anshel, 2000; Burke, Joyner, Pim, & Czech, 2000), volleyball (Van Yperen, 1998), baseball and softball (Rainey, 1995), rugby union (Nesti & Sewell, 2003) and soccer (Taylor & Daniel, 1988), but little was found about the mechanisms which motivate officials to continue their involvement despite the variety of potential physical, social and cognitive factors which are regularly encountered. The present study was designed to allow referees to convey their perceptions, particularly with regard to their methods for coping with demands and abuse and their reasons for remaining referees.

Social psychologists have identified a number of cognitive strategies that help people explain and deal with negative experiences. Blaming others for failure while taking personal credit for success, distorting or ignoring unpleasant information, and interpreting one's motives as principled and righteous, are among the variety of available methods of maintaining confidence in difficult circumstances. Misrepresenting reality with 'positive illusions' (Taylor & Brown, 1988, 1994) can ultimately be healthy and adaptive. Indeed, they serve a vital func-

tion of removing perceptions of self-blame, protecting from external censure, and providing palatable explanations for disturbing events. In the longer term, they may lead to more positive expectations about the future, greater persistence and self-efficacy. Taylor and Brown (1988) suggest that people who fail to use these strategies are more likely to be anxious or depressed.

Sports performers and coaches often make use of self-serving attributions (Biddle, 1993; McAuley & Duncan, 1989) to explain their own disappointing results. External factors such as bad luck or other people's incompetence are used to deal with unpleasant experiences, defeats, and rejection, while internal factors such as skill and effort are seen as responsible for victories and other successes. Lau and Russell's (1980) analysis of newspaper reports showed that players and coaches were more likely to attribute their successes to internal factors (such as skill and determination) and their losses to external factors (such as cheating opponents and poor weather) than sportswriters describing exactly the same events.

Another potentially useful mechanism is 'illusory superiority' or self-aggrandizement, where people adopt the view that they have more positive qualities than others (Alicke, 1985) and describe their personal strengths as above average compared with those of other people their age (Kleinke & Miller, 1998). The illusory nature of this is demonstrated by Lewinsohn, Mischel, Chaplin, and Barton (1980), who found that individuals made more flattering judgments about themselves than others made of them. Individuals also believe their personal relationships are of a higher quality than the relationships of others (Buunk & van der Eijnden, 1977) and remember experiences as more successful than they really were (Taylor & Brown, 1988).

Illusory superiority may be accompanied by unrealistic optimism (Hoorens & Buunk, 1992). Many studies show that people expect more positive and fewer negative outcomes for themselves than others. Weinstein (1980) found that students believed they were more likely than other students to live past the age of 80 and have a mentally gifted child, and less likely to lose their job, be sterile, or have a heart attack. This study also revealed that the greater the perceived controllability of the event, the greater the optimism. This suggests that people have greater confidence in their likelihood of taking appropriate steps to ensure a promising outcome. In support of this, Hoorens and Harris (1998) demonstrated that people report higher frequencies of healthy behaviors for themselves than for others.

The illusory nature of this self-aggrandizement was further demonstrated by Schmidt, Berg and Deelman (1999) who reported that although older adults were willing to admit to a decline in their memory when their reference point was that of their own memory at age 25, they expressed superiority when they compared themselves with their own peers and even 25-year old adults.

Biases such as illusory superiority and self-serving attributions may thus encourage people to maintain the view that criticism from others is undeserved and based on faulty reasoning. The present study was designed to examine the extent to which potential stressors are seen as problematic by referees and identify the psychological mechanisms used to maintain confidence. It was predicted that referees would make use of a number of cognitive strategies to help them cope with the demands of their role. These are likely to include externalizing reasons for abuse to absolve themselves of blame, construing errors as a means for improvement, assuming superiority over others, and conceptualizing their refereeing as a positive contribution to soccer.

Method

Participants

A senior English soccer league endorsed a project on referees' perceptions and provided a list of 63 names and addresses of qualified county officials who had refereed for at least three years. All were sent a letter giving procedural details of the project and asking if they would volunteer to complete a battery of questionnaires. Forty-two of the referees (67%) agreed to take part.

The average age of the volunteers was 40.04 (SD= 3.83), ranging from 33-46. Of these, 95% were in full-time employment in a variety of professions, including five police officers, five teachers, three in management, and two in the fire service. Of the sample 94% were educated to GCSE level or higher. Their average years as a referee was 12.33 (SD = 5.50), ranging from 4-25. All were male.

Instrument

A 4-page questionnaire was constructed to gather personal details of background and perceptions. Information regarding years of experience, level of refereeing and time spent on duties, support and training were obtained. Referees also rated the extent to which various factors motivated them in their role as an official, with blank spaces left so that the participants could indicate additional factors. Following this, participants were asked to indicate their perceptions of themselves and responses to various stimuli such as hostile crowds, verbal and physical abuse, lack of recognition, and failure to be selected). The items were identified through a focus group of different referees prior to the study, where a brainstorming session was used to identify the most salient influences. Some of the items related to stress were adapted from the Soccer Officials' Stress Survey (Taylor & Daniel, 1988). Finally, the referees were asked to rate their qualities as an official, compared to other officials operating at their

level, on 15 characteristics such as knowledge of the rules, honesty, fitness, and decisiveness. Aside from the personal details section and open-ended questions, all items used 1-4 Likert-format scales, with the exception of the 5-point illusory superiority scales, where a midpoint was required for referees to indicate if they felt neither superior nor inferior to other referees. The items were analyzed at the individual level rather than pooled into factors.

Procedure

Permission was received by the official referees' association to approach potential volunteers by mail. All participants completed an informed consent form indicating that their individual responses would be confidential and that generalized feedback of results from the study would be provided after completion of the project. The questionnaires were accompanied by self-addressed postage-paid envelopes. The protocol described above was approved by Northumbria University School of Psychology & Sport Sciences Ethics Committee.

Results

Potential Stressors

All respondents stated that they officiated 'most weeks' during the soccer season. An average time of 16.10 (*SD*= 7.24) hours, ranging from 5-36 hours per week, was spent on travel, preparation, officiating, and match reports, and 71 % of the sample stated that they felt physically drained after matches. Some referees noted that these demands sometimes led to conflicts with occupation (50%) and family (38%) commitments. However, 100% asserted that the time and energy they put into refereeing was worthwhile.

Many referees expected to be the object of abuse or dissent from players (41%), coaches or managers (44%), and spectators (63%). However, of the 22 items which referred to factors contributing to stress, few were endorsed as negatively affecting the officials. On only four items was the mean rating over 2.5, the theoretically neutral point on the 4-point scale. These results are indicated in Table 1.

Other experiences such as physical assaults, verbal abuse from players, awarding a penalty, sending off a player, disagreeing with co-officials, failure to be selected for important games, maintaining concentration, bad weather conditions, and media reactions were not rated as at all stress-provoking.

Explanations for dissent and abuse

Table 2 indicates that the officials tended to externalize the reasons for dissent and abuse by focusing on other people's bias and lack of knowledge. Actual referee error was deemed least responsible for criticism received. The most popular explanations were interpreted as observer bias, misunderstandings of the laws of soccer, and emotional responses. Crowd influences, sincere beliefs, and attempts to persuade the referee were moderately endorsed.

Responses to errors

All officials admitted to having made errors and having experienced a 'bad game'. Responses to these negative experiences are shown in Table 3. The most highly endorsed items refer to the positive opportunity to analyze and learn from mistakes, while those least endorsed involved worrying and dwelling over errors.

Illusory superiority

The referees rated themselves as superior to fellow referees on all of the 15 characteristics listed (see Table 4) by indicating 4 (I am slightly better) or 5 (I am much better) on the 5-point scale. One sample t-tests revealed that the mean responses on every item, as well as the total means, were significantly higher (all $p<.001$) than the 'average' point 3.

Rarely did the referees rate themselves as worse than others, the highest level being 10% reached for 'fitness'. However, when the referees were asked how their officiating would change if they were fitter, 33% said only a little better, 29% somewhat better, and only 17% much better. The remaining 21% believed their officiating would be no better.

Involvement in refereeing

The most highly endorsed reasons for refereeing were those relating to the intrinsic devotion to soccer, while the most rejected were concerned with rewards such as power, income, prestige, recognition and respect (see Table 5).

The referees generally felt that valuable support systems were in place and took advantage of these, with 93% having attended local and national meetings and 86% having sought advice about officiating issues. In addition, 43% trained with other officials and 79% felt able to talk about negative experiences with close friends and family members. There were significant correlations between the use of the various support systems (meeting attendance and seeking advice ($r = .62$, df = 40, $p<.001$); meeting attendance and training with others ($r = .40$, df = 40, $p<.01$); and seeking advice and training with others ($r = .51$, df = 40, $p<.001$).

Table 1. *Potential stressors receiving highest ratings.*

Potential stressor	MEAN	*SD*	% endorsing
Having a 'bad' game	2.93	0.84	62
People who protest decisions when they don't understand the laws of the game	2.74	1.13	60
Possible demotion to a lower level of officiating	2.71	2.35	33
Verbal abuse by managers, coaches or spectators	2.60	0.91	50

Table 2. *Perceived reasons for dissent and abuse.*

Reason	Mean	*SD*	% endorsing
People not understanding the laws of football.	3.52	.64	93
People's bias toward their team.	3.52	.70	89
People reacting to the heat of the moment.	3.41	.64	93
People being influenced by other dissenters.	2.89	.71	77
People expecting me to ignore or reinterpret the laws of football.	2.56	.86	37
People's sincere beliefs that I am wrong.	2.56	.80	44
People's conscious attempt to persuade me to be more lenient toward their team.	2.52	.80	41
My actual errors.	2.07	.66	11

Table 3. *Responses to errors.*

RESPONSE	Mean	*SD*	% endorsing
Try to learn something from it.	3.81	.40	100
Analyse what happened so I can understand it better.	3.78	.51	96
'Replay' the situation in my mind and imagine what I should have done.	3.63	.69	96
Remind myself that I tried my best.	3.52	.80	89
Talk to fellow officials about what happened.	3.41	.64	93
Remind myself that my errors are rare.	3.19	.62	90
Enjoy the comfort and company of my family and/or friends.	3.15	.91	74
Remind myself of all the good games I've had	2.96	1.04	69
Remind myself of the difficulties of getting every decision right.	2.96	.94	70
Try to think of other things rather than dwell on it.	2.74	1.10	63
Feel a temporary loss of pride.	2.67	.83	67
Feel embarrassed.	2.16	.89	32
Nothing – just ignore it.	1.82	.96	29
Worry that it might happen again.	1.74	.90	22
Toss and turn over it.	1.65	.69	12
Have a stiff drink.	1.63	1.01	22
Worry that my 'superiors' will hold it against me.	1.63	.84	15
Worry that I might get a bad reputation.	1.44	.64	7

Individual differences

Analyses of relationships between individual differences (education, age, years as referee) and other questionnaire items yielded no significant differences between subgroups.

Discussion

The results portray soccer officials as confident and resilient individuals who are highly motivated by their devotion to soccer, the opportunity to contribute to the sport, and pride in their accomplishments. Indeed, the love of soccer was the only item on the questionnaire where every single respondent gave the highest possible answer. This result is consistent with that found by Burke, Joyner, Pim, and Czech (2000), where 'love of the game' was the most frequently cited reason for choosing to become a basketball official. Similarly, Purdey and Snyder (1985) found that enthusiasm for their sport was the main motivator for high school basketball officials. However, these basketball officials also endorsed extra money and feelings of power, factors which were rejected by the soccer referees in the current study.

The present sample admit to experiencing occasional 'bad games' and identify these as moderately stressful but do not feel unduly disheartened by such experiences. In addition, they acknowledge the fact that they are targets of criticism but do not express concern about disparagement; indeed, one respondent described verbal abuse as "like water off a duck's back". This result is consistent with the findings of Rainey and Winterich (1995) with basketball referees and Rainey and Hardy (1997, 1999) with rugby referees, where only low to moderate levels of stress were indicated. The latter gave questionnaires to over 600 rugby union referees from Wales, Scotland, and England, and found that fear of physical harm was unrelated to stress levels, while time pressure and interpersonal conflict were only mildly related. Similar findings were reported by Goldsmith and Williams (1992), who found that physical harm, verbal abuse, time pressures and fear of failure did not contribute to stress levels in volleyball and soccer referees.

The present questionnaire responses provide evidence for the use of a number of strategies which might reduce or eliminate the troublesome nature of such factors. Support systems allow officials to talk and train with each other, facilitating the exchange of experiences and constructive advice. Such support is likely to engender feelings of group identity (see Hogg & Abrams, 1988), and it is possible that referees are bolstered by the fact that they share many views and experiences. Considering oneself an 'ingroup' member results in taking pride in and defending the collective (Schmader & Major, 1999). Referees are further supported by friends and family, with whom many referees feel able to discuss negative or controversial incidents.

Table 4. *Perceptions of superiority.*

	% better than others	% worse than others		Mean	*SD*	*t**
Visual perception	55	2	3.71	1.04	4.44	
Commitment	69	0	4.17	1.10	6.86	
Honesty	67	0	4.07	1.09	6.37	
Willingness to accept a mistake	67	0	4.10	1.10	6.45	
Accurate judgments during a game	50	2	3.71	1.09	4.25	
Fitness	50	10	3.74	1.23	3.89	
Decisiveness	64	0	3.91	1.03	5.68	
Dealing with heated situations	59	2	3.88	1.11	5.15	
Confidence	76	2	4.22	1.11	7.05	
Knowing the intentions of the players	64	5	3.91	1.12	5.23	
Reading the game	67	2	3.98	1.09	5.79	
Interacting with fellow officials	57	5	3.86	1.16	4.79	
Spotting a player who 'cheats,' e.g., by diving	41	0	3.71	1.12	4.03	
Making offside decisions	64	0	4.00	1.08	5.99	
Knowledge of the rules	62	0	3.98	1.09	5.79	
TOTAL MEAN	60.8	2.00	3.92	0.94	6.24	

*$p<.001$ for all

Table 5. *Reasons for refereeing (Not at all [1] – Very much [4]): Means (and standard deviations).*

Most endorsed	Mean (*SD*)	Least endorsed	Mean (*SD*)
The love of football	4.00 (0)	The feeling of power and control	1.64 (.76)
The opportunity to contribute to football	3.71 (.46)	The extra income	1.81 (.80)
Pride in accomplishments	3.69 (.56)	The prestige and recognition	2.55 (.99)
The challenge and excitement	3.62 (.62)	The respect received	2.62 (.85)

Although all officials noted that they had at times made errors, they contended that such mistakes are ultimately beneficial to their professional development by providing opportunities for improvement. The most common responses relate to the desire to learn from errors by mentally replaying and analyzing them and imagining how a different behavior might have represented a more appropriate decision on their part. Such counterfactual thinking, where people generate mental representations of alternatives to the existing reality, can function to improve preparation for similar future events (Roese, 1994).

The evidence also suggests that officials engage in a variety of confidence-enhancing cognitions which can serve to console them. They are unlikely to ignore their errors, feel embarrassed by them, or worry about their recurrence and implications. Instead, they try to analyze their mistakes and remind themselves that they tried their best, that their errors are rare, and that getting every decision right would be impossible. This allows them to remain self-assured and expectant about future encounters. Perceiving errors as temporary and unusual might allow referees to sustain the belief that such situations are less likely to recur and are in fact likely to improve their competence. These processes may help officials explain the mismatch between their perceived competence and the criticism received from others. Such discrepancies are known to produce extreme emotions such as confusion and unhappiness (Higgins, 1987) which people are motivated to resolve.

The use of external attributions also helps officials to come to terms with negative assessments of their performance. Rather than assuming that criticism is mainly a result of their own errors, the referees focus on misunderstandings and partiality on the part of players, fans, coaches, and managers. The most highly endorsed reasons for abuse centered on other people's lack of knowledge of the laws of soccer, interpersonal bias toward one's team, and heated emotions. Discounting responsibility and re-attributing blame in this way has been shown to protect emotional well-being (Major, Kaiser, & McCoy, 2003).

Self-aggrandizement is another coping strategy which was highly evident among the referees. Rarely did anyone admit to being lower than average on a characteristic deemed important for refereeing; most respondents asserted that they were better than fellow referees operating at the same level. Since the referees were comparing themselves with each other, the illusory nature of these ratings is striking: not everyone in the group could be above average. This result is consistent with the findings of Kleinke and Miller (1998), whose participants viewed themselves as being above average on a number of personal qualities. The researchers also found a linear relationship between the level of superiority expressed and measures of psychological well-being.

The characteristic which attracted the greatest level of confession of inferiority was fitness, and even here only 10% admitted to being 'worse than others'. Interestingly, however, many of the referees contended that their officiating would not improve if they were fitter, suggesting the possibility of further self-serving distortion or denial.

Following Taylor and Brown's (1988) original paper on the benefits of positive illusions, deceptive self-enhancing mechanisms have continued to be associated with psychological well-being by several recent theorists (Taylor, Lerner, Sherman, Save, & McDowell 2003; Gramzow, Elliot, Asher, & McGregor 2003). Taylor and Armor (1996) even suggest that higher levels of such positive illusions can help people to deal with stressful events of an extreme nature such as cancer, heart disease, and HIV infection. However, Colvin and Block (1994) have criticized the basis of this view and questioned the extent to which the processes Taylor and Brown (1988) identified in their paper actually represent distortions of reality. Also, studies by Robins and Beer (2001) suggest that while self-enhancing beliefs have positive short term effects, their deceptive nature can lead to arrogance or complacency and thus render them maladaptive over time.

Withstanding abuse and dissent while concurrently carrying out a complex task requires assuredness and conviction. The origins of such characteristics in officials are unclear and need further exploration. It is possible that refereeing attracts people who have a high level of self esteem and already use coping mechanisms successfully, while people with lower levels of self worth may find that they are unable to cope with the demands of refereeing and drop out.

Additionally, holding a position of power and being supported by a strong infrastructure could serve to increase confidence. Such qualities, however, may not inevitably lead to good performance, as some people with high levels of self-esteem react aggressively and defensively when their self-image is threatened (Baumeister, Smart & Boden, 1996), particularly if their self-esteem is unstable and only high in certain situations (Kernis & Waschull, 1995).

Although Folkesson et al. (2002) found that younger referees were most susceptible to threat and aggression, no such difference was found in the present sample. The responses to abuse and the coping process appear to be similar for groups regardless of their age, experience, and education. It should be noted, though, that males have been found to use more positive illusions than females (Boyd-Wilson, Walkey, McClure, & Green, 2000). Given that only one female referee was represented in the present sample, it is possible that different coping mechanisms might be found in a less male-dominated group.

In summary, the results suggest that soccer referees are able to remain confident in the face of considerable abuse and criticism. Two pertinent questions remain unanswered, however. First, whether the hardiness that characterizes the participants in the present study is the result of a stable underlying disposition or acquired with training and experience is unclear at this point. This could have important implications for the recruitment and training of referees. Second, processes such as illusory superiority and self-serving bias are apparent among people of all walks of life, and it would be useful to know whether referees have a particular need or tendency to rely on these. These issues are currently being addressed. In any case, it does appear to be clear that referees make use of a range of coping mechanisms which might well underlie the robustness which characterises their approach to officiating and their ability to withstand abuse. As Premiership referee David Elleray said, "...you get more criticism than praise, and you have to accept that as part of the job." (Learning English, 2006).

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